MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PRODUCT AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the Substance or Preparation: **ProCrystal**

1.2 Intended use of the Substance/Preparation: Dry formulation containing naturally occurring bacteria on an organic carrier, used in the clarification of pond, lake and river water.

1.3 Company/Undertaking Identification:

Scotts International BV
Nijverheidsweg 5
6414 NM Heerlen
The Netherlands
Tél. : +31 (0) 45 5609100
Fax : +31 (0)45 5690190

2. COMPOSITION/INFORMATION ON INGREDIENTS

Contains only natural raw materials with no associated hazards, and a consortium of selected Class 1 bacteria (see Section 11)

3. HAZARDS IDENTIFICATION

Most Important Hazards: The preparation is not classified as dangerous according to the criteria laid down in Council Directive 1999/45/EC:

Most Important Adverse: Potential dust hazard.

4. FIRST-AID MEASURES

Exposure by inhalation: Remove victim to fresh air. Seek medical attention if symptoms occur.

Exposure by skin and eye contact:
- Skin - Immediately wash affected area thoroughly with water. Seek medical attention if irritation develops.
- Eyes: Immediately flush eyes with plenty of water and seek medical attention if irritation develops.

Exposure by ingestion: Do not induce vomiting. Drink fluids to dilute.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water, foam, dry chemical or carbon dioxide extinguishers may be used.

Extinguishing media not to be used: None

Specific Exposure Hazards: If the substance is involved in a fire, oxides of carbon and nitrogen may be evolved.

Protective Equipment for fire-fighters: Full protective clothing and self-contained breathing apparatus should be worn.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Evacuate personnel from immediate vicinity. Wear eye protection (e.g. goggles), in case of dust.
Environmental Precautions:	It is not anticipated to be hazardous for environment.
Methods for Cleaning Up:	Stop the leak or release at source. Transfer the spillage to waste containers labelled in the same way as the original containers. Clean the spillage area with water and detergent. Small releases should not pose any hazard to the local environment.

7. HANDLING AND STORAGE

7.1 Handling:

Precautions:	The substance should be handled under conditions of good occupational safety and hygiene and in accordance with any local regulations in order to avoid unnecessary exposure.
Technical Measures:	The use of gloves is recommended to reduce exposure to the preparation.
Specific Requirements:	None.

7.2 Storage:

Specific design for Storage rooms or vessels:	None
Incompatible Materials:	Strong acids or alkali compounds may inactivate biological cultures. Strong oxidising agents. Do not store in metallic containers
Conditions of Storage:	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Avoid freezing temperatures and above 45 °C to preserve biological stability.
Quantity Limits:	None
Packaging Materials:	Empty packaging can be recycled or reused.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:	None
Specific Control Parameters:	None
Personal Protective Equipment:	The provision of personal protective equipment should be decided upon by the user as part of a formal exposure risk assessment. Based upon the available toxicological information the protective measures described below should be regarded as a minimum.
Respiratory Protection:	If operating conditions create high airborne concentrations of this material, based upon available information and in the absence of occupational exposure limits the use of a vapour mask to a minimum standard of EN405 FFA1is recommended.
Hand Protection:	Avoid skin contact chemical protective gloves to a Standard EN374 should be provided.

Eye Protection:	Care should be used to prevent eye exposure and eye protection should be used when handling the preparation. The protection should be capable of giving chemical protection as classified in BS2092 or EN166.
Skin Protection:	Avoid skin contact, prolonged/frequent direct handling of the material should be avoided. Cover any skin wounds and abrasions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Free flowing, tan-coloured powder
Odour:	Mild, organic
pH:	6.5-8.5
Boiling Point/Boiling Range:	100 °C
Melting Point/Melting Range:	Not applicable
Flash Point:	Not determined
Flammability (Solid, Gas):	Not applicable
Autoflammability:	Not determined
Explosive Properties:	Predicted not explosive based on chemical structure.
Oxidising Properties:	Not determined
Vapour Pressure:	Not applicable
Bulk Density:	approx 0.66-0.77 g/cm^3
Solubility - Water solubility:	Miscible (dry product)
- Fat solubility:	Not determined
Partition coefficient n-octanol/water:	Not determined
Other Data:	None available

10. STABILITY AND REACTIVITY

Conditions to Avoid:	Excessive temperature variations, below 0°C or above 45 °C
Materials to Avoid:	Strong acids or alkali compounds may inactivate biological cultures and strong oxidising agents.
Hazardous Decomposition Products:	None anticipated

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxic effects

11.1.1	Ingestion, LD50 Rat oral (mg/kg):	Not determined
11.1.2	Inhalation, LC50 Rat inhalation (mg/l/4h):	Not determined
11.1.3	Skin, LD50 Rat dermal (mg/kg)	Not determined
11.1.4	Eye irritation	Not determined

11.2 Chronic toxic effects

11.2.1	Sensitisation	Not determined

Contains naturally occurring Class 1 bacteria as defined by Council Directive 93/88/EEC. No special precautions are necessary other than maintaining good principles of occupational safety and hygiene according to Council Directive 2000/54/EC

12. ECOLOGICAL INFORMATION

Mobility:	This preparation is miscible with water. Therefore it is likely to distribute predominantly to the aqueous environment.
Biodegradability:	The preparation is expected to biodegrade rapidly. However no information on anaerobic biodegradation is available.
Accumulation:	Not anticipated to bioaccumulate due to high water solubility and hence, biomagnification is not likely.
Ecotoxicity:	The preparation is not anticipated to pose any environmental hazard. No data on toxicity specifically to soil organisms, plants and terrestrial animals are available.
Other adverse effects:	There is no ozone depletion, photochemical ozone creation or global warming potential. Adverse effects in the sewage treatment plant are not anticipated.

13. DISPOSAL CONSIDERATIONS

Waste from Residues:	Dispose of by incineration, landfill or to drain in accordance with local regulations. Stack gases should be scrubbed.
Contaminated Packaging:	Dispose of by incineration or landfill in accordance with local regulations. Empty packaging can be recycled or reused.

14. TRANSPORT INFORMATION

International Regulations	Land:	Not applicable.
	Inland waterways:	Not applicable.
	Sea:	Not applicable.
	Air:	Not applicable.
UN classification number:	None	
Local Regulations:	Any relevant local regulations concerning transport should be observed.	

15. REGULATORY INFORMATION

EC Regulations:	The preparation is not classified as "dangerous" and therefore the following labels according to the requirements of Council Directives 2001/59/EC and 1999/45/EC are necessary:
Symbol:	None
R-phrases:	None
S-phrases:	None

The preparation is not deemed ‘hazardous’ according to the requirements of Council Directive 2000/54/EEC

Local Regulations: Any relevant local regulations should be observed.

16. OTHER INFORMATION

This information contained herein is, to the best of Scott's knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Scotts shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Scotts shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product